In the Specification:

Please replace the paragraph on Page 1, lines 4 - 8 with the following amended paragraph:

-- This application is co-pending with and claims pursuant to 35 U.S.C. § 120 as to its common subject matter the filing date of patent application serial number 09/637,742, filed August 11, 2000, and patent application serial number 09/657,745, filed September 8, 2000. --

Please replace the paragraph on Page 1, lines 11 - 14 with the following amended paragraph:

-- The invention relates generally to wireless networks, and more particularly to an adapter and method for extending stand-alone wireless access points to enable their delivery of an integrated solution within a network environment. --

Please replace the paragraph which begins on Page 1, line 26 and carries over to Page 2, line 10 with the following amended paragraph:

-- Traditional wireless access points provide limited functionality, essentially limited to enabling a so-called "hotspot" of connectivity to the LAN. The access point operates by forwarding data packets from the wireless environment to the wired LAN, and vice versa. However, within an environment containing multiple access points, conventional stand-alone access points have several limitations. For example, a stand-alone access point: (1) cannot be centrally managed; (2) cannot support layer 3 (IP) roaming with other access points; (3) cannot enforce quality-of-service (QoS) metrics; (4) cannot deliver centralized logging and reporting; and (5) provides only limited security and authentication capability, and no server managed security. --

Please replace the paragraph on Page 2, lines 11 - 28 with the following amended paragraph:

-- Existing efforts to address the aforementioned limitations involve the incorporation of new infrastructure into an existing network to provide some of the missing services for the access points. One example of this approach is the combination of a Cisco Aironet 350 access point and a Cisco Secure Access Control Server for delivery of authentication and dynamic encryption key generation services. Another example of this approach is the incorporation of a 3Com SuperStack II switch for delivery of authentication and virtual private networking (VPN) access to wireless users. Such conventional approaches, however, require one or more of the following: (1) mandatory software on the client devices (e.g., VPN software); (2) particular versions of wireless client hardware or firmware, thereby forcing a homogeneous environment; (3) upgrades to the existing wireless access points; and (4) complex network configurations, since multiple pieces of infrastructure must be separately installed, configured and managed. --

Please replace the paragraph which begins on Page 2, line 29 and carries over to Page 3, line 2 with the following amended paragraph:

-- These requirements make deployment difficult, limit device choice, and do not provide a scalable approach to delivering all of the required services for the access points in an enterprise network. Accordingly, there is an established need for improvements over prior art wireless access point systems. --

Please replace the paragraph on Page 3, lines 10 - 17 with the following amended paragraph:

-- In a preferred embodiment of the invention, an adapter device is provided connected to

each short-range wireless access point in a network. Each packet transmitted between an access point and the wired LAN passes through the adapter. The adapter may be implemented as a stand-alone Personal Computer (PC), a special-purpose computing appliance, or as a component that is physically coupled to the access point, with the component / access point combination encapsulated within a single enclosure. --

Please replace the paragraph on Page 4, lines 8 - 10 with the following amended paragraph:

-- FIG. 4 is a flow chart illustrating a method for forwarding a packet to a wireline interface, in accordance with the present invention; --

Please replace the paragraph which begins on Page 4, line 28 and carries over to Page 5, line 8 with the following amended paragraph:

-- Referring now to FIGS. 1 and 2, one or more adapters 101 are provided connected to corresponding short-range wireless access points 100. In the preferred embodiment of the present invention, adapter 101 has two network interfaces, a wireless network interface and a wireline network interface. The wireless network interface is connected directly to each access point 100, while the wireline network interface is connected directly to a local area network (LAN) 102 or, alternatively, to a switch/router (not shown in FIG. 1). In this manner, all packets sent between access point 100 and the wired LAN 102 must pass through the adapter 101. --

Please replace the paragraph on Page 5, lines 25 - 30 with the following amended paragraph:

-- In an alternative embodiment of the present invention, adapter 101 functions with an

existing wired LAN port, instead of a short-range wireless access point 100. In this case, the adapter's wireline interface 200 is attached to a LAN port (as usual), and a client device or switch can be attached to the adapter's wireless network interface 201 (instead of an access point). --

Please replace the paragraph which begins on Page 5, line 31 and carries over to Page 6, line 11 with the following amended paragraph:

-- Commonly-assigned pending U.S. patent application serial number 09/637,742, filed August 11, 2000, and incorporated herein by reference, which is titled "Enabling Seamless User Mobility in a Short-Range Wireless Networking Environment", discloses a wireless networking system wherein a central core server resides in the network infrastructure and provides services to Handoff Management Points (HMPs) as users of devices roam through the environment. The system of the present invention can be implemented in combination with this commonly-assigned invention, wherein the network control server 103 is co-located with the core server or, alternatively, where the network adapters 101 are co-located with the HMPs. This combined configuration enables clients to travel seamlessly between access points that do not directly support coordination through the core server. --

Please replace the paragraph on Page 6, lines 12 - 30 with the following amended paragraph:

-- Commonly-assigned pending U.S. patent application serial number 09/657,745, filed September 8, 2000, and incorporated herein by reference, which is titled "Location-Independent Routing and Secure Access in a Short-Range Wireless Networking Environment", discloses a system wherein a routing coordinator maintains a plurality of connection table records and

wherein a plurality of Home Agent Masqueraders (HAMs) and Foreign Agent Masqueraders (FAMs) communicate with the routing coordinator to ensure that client data connections are preserved as the client travels throughout the short-range wireless network environment. Each of the connection table records includes a client address and port, and a server address and port. The system of the present invention can be implemented in combination with this commonly-assigned invention, where the network control server 103 is co-located with the routing coordinator or, alternatively, where the network adapters 101 are co-located with the HAMs and FAMs. The combined configuration enables clients to preserve network connections as they travel through a short-range wireless network environment and communicate with access points that do not directly support coordination through the routing coordinator. --

Please replace the paragraph on Page 7, lines 8 - 15 with the following amended paragraph:

-- Wireline network interface 200 can comprise an Ethernet, token ring or other any other local area network (LAN) interface known in the art. In the preferred embodiment of the present invention, network adapter 101 incorporates a single wireline network interface 200. However, as will be apparent to those skilled in the art, alternative embodiments of the present invention can include multiple wireline network interfaces, each connecting the adapter 101 to a different LAN. --

Please replace the paragraph on Page 7, lines 16 - 23 with the following amended paragraph:

-- Wireless network interface 201 can comprise an Ethernet connection, serial cable, RS232 or other cable connection to a wireless access point 100. Preferably, network adapter 101

incorporates a single wireless network interface 201. However, as will be apparent to those

skilled in the art, alternative embodiments of the present invention can include multiple wireless

network interfaces, each connecting the adapter 101 to a different wireless access point 100. (See

FIGS. 5 - 7, for example.) --

Please replace the paragraph which begins on Page 7, line 24 and carries over to Page 8, line 2

with the following amended paragraph:

-- Network coordination software 202 is provided for communicating with the network

control server 103 to provide coordination functions on behalf of the adapted access points 100

within the managed network environment. In the preferred embodiment of the present invention,

the network coordination software 202 enables the adapter to retrieve network security and

quality-of-service policies, retrieve packet rewriting rules, transmit logs and alerts, and

disseminate information pertaining to device arrival and departure. Furthermore, the software

receives management commands that are forwarded to the access point itself. --

Please replace the paragraph on Page 8, lines 19 - 32 with the following amended paragraph:

-- In an alternate embodiment of the present invention, the augmented IP stack 203

includes support for a mobile IP Foreign Agent (FA). The mobile IP protocol is defined in RFC

2002, available on the Internet at www.rfc-editor.org. In a further alternate embodiment of the

present invention, the augmented IP stack includes services that detect and handle packets

corresponding to various standard protocols such as the Domain Name Service (DNS) protocol,

Dynamic Host Configuration Protocol (DHCP), Remote Authentication Dial-In User Service

(RADIUS) protocol, and Internet Group Management Protocol (IGMP). The augmented IP stack, upon detecting a packet corresponding to one of these services, may filter the packet, forward the packet or generate a response in accordance with the policies within the managed network environment. --

Please replace the paragraph on Page 10, lines 6 - 28 with the following amended paragraph:

-- Referring now to FIG. 5, the adapter 101 is illustrated connected to a plurality of access points 100 via a switch 500. In an alternative embodiment of the present invention, adapter 101 provides services to a plurality of short-range wireless access points 100. In this environment, a plurality of short-range wireless access points 100 are individually coupled to switch 500. Although FIG. 5 depicts each access point 100 located on a dedicated segment connected to the switch 500, it will be apparent to those skilled in the art that a single LAN segment can contain multiple wireless access points. Adapter 101 is also attached to switch 500. In this embodiment, the adapter's wireline and wireless interfaces are preferably integrated into a single connection 503 of switch 500. In one implementation of this embodiment, the switch 500 is programmed to automatically forward all inbound packets originating from access point LAN segments 501a, 501b, 501c (for example) to the LAN segment 503 containing the adapter 101. The switch 500 is also programmed to automatically forward all packets not originating from the LAN segment 503 containing the adapter (e.g., originating from LAN 102 and arriving via segment 502) and destined to an access point LAN segment 501, to the LAN segment 503 containing the adapter 101. In this manner, the adapter 101 can receive and process all packets originating from and destined to the access points 100. --

Please replace the paragraph which begins on Page 10, line 29 and carries over to Page 11, line 3 with the following amended paragraph:

-- Referring now to FIG. 6, in a further alternate embodiment of the present invention, adapter 101 supports a plurality of switched LANs 500, at least some of which contain wireless access points. In FIG. 6, adapter 101 is shown connected to three switched LANs containing wireless access points. This is merely for illustrative purposes; obviously, the number of LANs and access points can vary. --

Please replace the paragraph on Page 11, lines 4 - 13 with the following amended paragraph:

-- A plurality of short-range wireless access points 100 provided are coupled to each switch 500. There are three access point LANs and the switch 500 of each LAN is connected to the wireless network interface of an adapter 101. The wired network interface of the adapter is connected to a pair of wired LANs 102. One or more personal computers (PCS) 600 are provided connected to each of the wired LANs. In this case, the adapter 101 receives packets sent to or from access points connected to all three switches 500. Moreover, the adapter is able to process packets sent to or from multiple wired networks 102. --

Please replace the paragraph on Page 11, lines 14 - 21 with the following amended paragraph:

-- The access points 100 or wireless clients may be programmed to forward all wireline-destined packets to the adapter 101 by defining the destination media access control (MAC) address to be that of the adapter. For example, the access points 100 can be programmed to treat the adapter 101 as a default IP gateway for network traffic. --

Please replace the paragraph on Page 11, lines 22 - 25 with the following amended paragraph:

-- In an alternate implementation of the present invention, the network control server 103 can be co-located with the adapter 101 to reduce the quantity of servers necessarily installed in the network environment, and to reduce the overall system cost. --

Please replace the paragraph on Page 12, lines 3 - 8 with the following amended paragraph:

-- Referring now to FIG. 7, the adapter 101 is illustrated connected to access points 100 which are connected to multiple different wireless networks. These different wireless networks can employ the same network technology, in which case they have distinguished network identifiers, or they can employ different network technologies such as 802.11 and Bluetooth. --

Please replace the paragraph on Page 12, lines 9 - 15 with the following amended paragraph:

-- Access points 100 from different wireless networks are connected to an adapter 101 wireless network interface. The adapter wired network interface is connected to the wired Local Area Network 102. It is to be understood that in alternative embodiments, the adapter can be connected to different wireless networks through a plurality of switches, as previously described with respect to FIG. 5 and FIG. 6. --

In the Claims:

Please replace Claim 11 with the following amended claim:

1   11.   (Once amended) A system as recited in claim 1 wherein said means for communicating

2   further comprises network coordination software.